

REMARKS

Claims 1-20 are presently pending in the application. Claims 1, 8, and 15 are in independent form.

The drawings were objected to for including a reference numeral discrepancy and for failing to have function boxes indicating the function that they represent. A proposed drawing correction is being submitted with this Amendment, and the objections have been overcome.

Claims 1-8, 13 and 14 were rejected under §102(b) as being anticipated by Geddes. Claim 1 has been cancelled and the claims depending therefrom have been amended to depend from claim 8. Claim 8 has been amended to include the limitations of claim 13. Accordingly, claims 3 and 13 have been cancelled. Claim 8 requires that the passageway be arranged between the intake manifold and the throttle body. Geddes is directed to a sound cancellation system for use with an exhaust conduit. On page 4, second paragraph, the Examiner has argued that Geddes teaches that the passageway is arranged between an intake manifold and a throttle body at column 3, lines 53-66. Geddes, in fact, does not teach that the passageway be arranged between the intake manifold and throttle body. All that Geddes teaches is "other fluid systems using a conduit can also benefit from the use of the present invention". Accordingly, since Geddes does not disclose or suggest the limitations of amended claim 8, Geddes cannot anticipate or render obvious amended claim 8. As a result, claim 8 and the claims depending therefrom are allowable over Geddes.

Claims 9-12 and 15-20 were rejected under §103(a) as being unpatentable over Geddes in view of Fukami. Fukami and Geddes cannot be combined. Geddes discloses a transduce arrangement for active noise cancellation for exhaust systems. A sensor 12 and a feedback sensor 24 are arranged in space relationship along the exhaust system. Specifically, the sensor 12 is arranged between the catalytic converter 54 and the muffler 56, and the feedback sensor 24 is arranged between the terminal end of the exhaust system and the noise cancellation housing 58. The sensors 12 and 24 measure the actual noise in


the exhaust system and send a signal to the electronic controller 60. Based upon the actual noise sensed the controller 60 generates a signal to the loud speaker to actively cancel the noise. Measurement of engine speed as taught by Fukami provides no benefit in Geddes. That is, it does not matter in Geddes what the engine speed is, but only the actual noise in the exhaust system. As a result, there is not motivation for one of ordinary skilled in the art to combine Fukami and Geddes to obtain Applicants invention as defined in the claims. Accordingly, the combination is improper and claims 9-12 and 15-20 are allowable.

Additionally, the Examiner statement that speed of the engine is directly proportional to the noise produced by the engine it is inaccurate. Applicants request that the Examiner substantiate this claim.

It is believed that this application is in condition for allowance. If any fees or extension of times are required, please charge to Deposit Account No. 50-1482.

Respectfully submitted,

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Version with markings to show changes made

Please cancel claims 1, 3 and 13.

Please amend claims 2, 4, 5 and 8 as follows:

2. (Amended) The Helmholtz resonator according to claim [1] 8, wherein said neck is a tubular structure extending from said chamber.

4. (Amended) The Helmholtz resonator according to claim [3] 14, wherein said loudspeaker is a woofer.

5. (Amended) The Helmholtz resonator according to claim [3] 14, wherein said chamber includes a flange with said loudspeaker supported thereon, and said loudspeaker having a diaphragm disposed within an opening in said flange for producing said forced response.

8. (Amended) An induction noise attenuation system for a combustion engine comprising:

a portion of an air induction system defining a passageway arranged between an intake manifold and a throttle body carrying a sound wave;

a Helmholtz resonator having a chamber at least partially defining a cavity and a neck in said chamber fluidly connecting said portion of said air induction system and said cavity, said chamber and said neck producing a passive response to said sound wave;

an active resonator disposed within said chamber; and

a driver connected to said active resonator producing a signal for driving said active resonator and producing a forced response for supplementing said passive response.